

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of MUSA	Attorney docket # 1824A
Serial no:	Examiner:
Filing date:	Group Art Unit: 1714
Title: Curable Electron Donor Compounds	

Assistant Commissioner of Patents
Washington, DC 20231

PRELIMINARY AMENDMENT

Sir: This case is a continuation of application serial number 09/573,302.

Kindly enter the following amendments to the specification and claims.

A version of the specification page marked up to show changes made and a clean version are included. A clean version of the claims is included. All prior claims are canceled.

Applicants wish the Examiner to note that claim 20 in this case was original claim 4 and indicated as allowed by the Examiner.

IN THE SPECIFICATION:

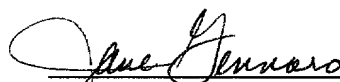
After the title and before the FIELD OF THE INVENTION, insert the following:

--This application is a continuation of US serial number 09/573,302.--

IN THE CLAIMS:

Cancel pending claims 1 to 17 and enter new claims 18 to 28.

Respectfully submitted,



Jane E. Gennaro, Reg. No. 34,884
Attorney for Applicants
Tel. 908-685-5205

National Starch and Chemical Company
P. O. Box 6500
Bridgewater, New Jersey 08807-0500

09/573,302

CURABLE ELECTRON DONOR COMPOUNDS

This application is a continuation of US serial number 09/573,302.

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FIELD OF THE INVENTION

This invention relates to electron donor compounds and to curable adhesive compositions containing the electron donor compounds.

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BACKGROUND OF THE INVENTION

Adhesive compositions, particularly conductive adhesives, are used for a variety of purposes in the fabrication and assembly of semiconductor packages and microelectronic devices. The more prominent uses are the bonding of integrated circuit chips to lead frames or other substrates, and the bonding of circuit packages or assemblies to printed wire boards.

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There exist electron acceptor/donor adhesives for use in low modulus adhesives, particularly in fast-cure adhesives for chip attach applications, in which vinyl ethers are the electron donors. However, the number of suitable vinyl ethers as donors is limited due to their low boiling points, high volatility, and difficult preparations. Thus, there is a need for the development of new electron donors suitable for use in adhesives applications.

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SUMMARY OF THE INVENTION

This invention relates to electron donor compounds comprising an electron donor group attached to a molecular (small molecule) or polymeric group. The electron donor is a carbon to carbon double bond connected to an aromatic ring and conjugated with the unsaturation in the aromatic ring.

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